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Amendments to the Drawings:

The attached sheet of drawings labels the Figure previously marked as Figure 7 as Figure 7A and Figure 7B (showing the magnification view), as requested by the Examiner.

Attachment: New Sheet

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Remarks/Arguments:

I. Introduction

Upon entry of the present amendment, claims 1-11 will be pending in this application. The Examiner has withdrawn claim 12 from examination. Claim 1 has been amended to incorporate the elements of claims 5 and 6, and those claims have been cancelled. Because the present amendment does not raise new issues requiring further consideration or search and does not introduce new matter, entry is appropriate under 37 C.F.R. § 1.116, and is respectfully requested. Based on the following remarks, Applicants respectfully request reconsideration of the Examiner's rejections and allowance of the pending claims.

II. Drawings

The Examiner has objected to the corrected drawing filed January 9, 2006 as referring to two views identified as a single Figure. The attached sheet of drawings includes Figure 7, re-labeled as Figures 7A and 7B, which are schematic figures showing the coupling in connection with an airplane seat (7A) and the close-up magnified view (7B), as requested by the Examiner. This sheet is labeled as "New Sheet."

III. Specification

The Examiner has objected to the specification as failing to refer to the new figures.

Appropriate correction has been made.

The Examiner has also objected to the detailed description as not providing appropriate antecedent basis for the "circular disc" in claim 3 and the elements of claim 8.

Although Applicants attempted to address this rejection is their previous response, the

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Examiner appears to have misunderstood the intent of those arguments. The drawings are a

part of the specification - accordingly, support for claim amendments in the figures means

that the specification does provide antecedent basis for the claims.

Nonetheless, in an abundance of cooperation and in the interest in advancing the

prosecution of this application, a written description of what is shown in the drawings has

been added to the specification. No new matter has been added because, as acknowledged

by the Examiner, the limitations are shown in the drawings as originally filed.

Other elements shown clearly in the figures, but not necessarily discussed in the

specification have also been clarified. Again, no new matter has been added because the

originally filed figures show the claimed elements.

IV. 35 U.S.C. § 112

The Examiner has rejected claims 1-11 under 35 U.S.C. § 112, first paragraph as

failing to comply with the written description requirement. The Examiner's position is that

the following claim element (reproduced as currently amended) is not supported by the

specification: "means, comprising a plurality of openings for receiving the pins of the other

hub assembly while providing clearance therefor, thereby permitting movement of the pins

within the openings to accommodate angular misalignment, parallel misalignment, and axial

misalignment of the received shafts." Applicants disagree.

Page 6 of the specification describes how force is transmitted through the system and

states that "angular misalignment tolerance may be as great as ten degrees. Parallel

misalignment may be tolerated as a function of clearance hole sizes, while axial

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misalignment is tolerated as a function of dowel pin length. If parallel misalignment is

significant, the dowel pins will move diametrically around the clearance holes of the

opposing hub as the coupling rotates." Page 7 also states that an object of the invention is to

"provide couplings adapted to accommodate angular, axial, and parallel shaft

misalignments."

V. 35 U.S.C. § 102

A. <u>Downey</u>

The Examiner has maintained the rejection of claims 1-6, 8, and 10-11 under 35

U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,798,924 to Downey. The

Examiner states that the mechanical connection between the flanges in Downey is affected

by the pin connection between the flanges at the center member 40, and that the clearance

between the openings 36 and pins 30 has no affect on the mechanical connection. Applicants

disagree.

1. No axial misalignment solution

While the Downey patent attempts to address the issue of parallel and angular

misalignment, it fails to accommodate axial misalignment, as presently claimed. If the two

flanges are subjected to excessive amount of torque or if the torsion element fails or is

severely damaged, or if any other axial misalignment were to occur in the Downey coupler,

the pins could move out of their recessed openings enough that the mechanical connection

between the two flanges would be lost. In other words, if the pieces become axial

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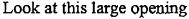
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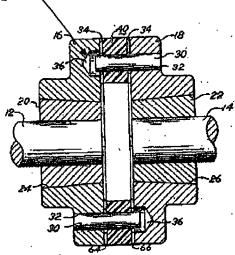
misaligned, the system would fail. Accordingly, the Downey patent fails to accommodate axial misalignment, as presently claimed.

2. Pins not of length sufficient to be substantially completely received

One reason that axial misalignment is not accommodated is because the Downey pins are not of a length that is sufficient to be received substantially completely by a means for receiving the pin. As mentioned, if any axial misalignment were to occur in the Downey coupler, the pins could move out of their recessed openings enough that the mechanical connection between the two flanges would be lost. This is at least partially because the pins are barely received by openings in the corresponding flange as shown in Figure 2, reproduced below.

Downey pins do <u>not</u> extend substantially completely into other hub;





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A slight disengagement of the flanges would cause the system to fail, whereas if the hubs of

the presently claimed invention were to disengage, the pins would remain in contact with the

other hub, holding the system together.

Thus, at least because the Downey reference does not teach or disclose (1)

accommodation of axial misalignment and (2) pins substantially received by the means for

receiving the pin, it cannot be found to anticipate each and every element of the pending

claims. The Examiner is respectfully requested to reconsider and withdraw the rejection.

B. Hickman

The Examiner has also rejected claims 1-11 under 35 U.S.C. § 102(b) as being

anticipated by GB Reference No. 582,901 to Hickman. The Examiner states that Hickman

shows a hub assembly with an opening for receiving the pin of the other hub assembly and

vice versa. Applicants disagree.

1. No opening for receiving a pin

The Hickman reference does not teach hub assemblies that have an opening "for

receiving the pin of the other hub assembly," much less a system in which those openings

accommodate angular misalignment and axial misalignment of the shafts. First, as shown by

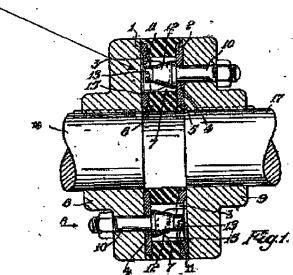
Figure 1 of the Hickman reference, the Hickman hub assemblies do not have the claimed

openings for receiving the pin of the other assembly.

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Hickman pins do <u>not</u> extend at all into other hub; They lie flush



The coupling bolts 10 (which the Examiner has characterized as the claimed pins) are contained by the cavities 7 of the resilient member 6 (see Hickman Figure 1; col. 4, lines 30), but they are not received by the opposite hub, as Applicants recite.

2. Pins not of length sufficient to be substantially completely received

Nor are the pins of a length sufficient to be received substantially completely by a means for receiving the pin. In fact, the Hickman claims clarify that the "heads of the coupling bolts within the cavities of the resilient member are extended to be substantially flush with the outer surface of the plates..." In short, heads that are flush with the plate are clearly not received by the plate. See Hickman, claim 1.

3. No axial misalignment solution

Because of at least the above reasons, the Hickman device cannot accommodate axial misalignment, as presently claimed. Another reason that the Hickman device cannot handle

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axial misalignment is because the "resilient member is sandwiched between and bonded to

two plates." See col. 1. If any axial misalignment were to occur, the bolt heads do not

engage with the opposite plate. The resilient member could be destroyed by overloading.

Accordingly, because the Hickman device cannot handle angular, parallel, or axial

misalignment, nor does it have the claimed pin geometry, Applicant respectfully requests that

the rejection be withdrawn.

C. Weiss

The Examiner has further maintained the rejection of claims 1-6, 8 and 11 under 35

U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,708,692 to Weiss. The Examiner

states that Weiss shows a first hub assembly having an opening for receiving a pin of the

other hub assembly. Applicants disagree.

The Weiss patent does not teach hub assemblics that have openings for receiving the

pin of the other hub assembly, nor a system in which those openings accommodate angular

misalignment and axial misalignment of the shafts. It appears that the Examiner is

considering the connecting flanges 6, 9 to correspond to Applicants' hub assemblies.

Applications respectfully point out that bolt 11 is screwed into the other flange, and it can

only be screwed in one way. It is not received within an opening that can "accommodate any

combination of angular misalignment, parallel misalignment, and axial misalignment," as

Applicants recite. By its nature, a screw/screw thread assembly in intended holds the screw

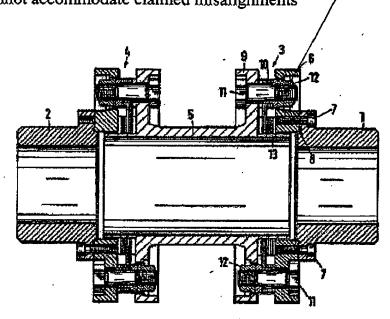
securely in place and does not accommodate for parallel or angular misalignment (and if it

can accommodate axial misalignment, likely only in negligible amounts). Accordingly, there

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is no teaching or suggestion of the present claims and withdrawal of the rejections is respectfully requested.

Weiss "pin" 11 is <u>screwed</u> into the flanges (which Examiner is referring to as hubs) So the system cannot accommodate claimed misalignments



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CONCLUSION

For at least the above reasons, Applicants respectfully request allowance of claims 1-11 and issuance of a patent containing these claims in due course. If there remain any additional issues to be addressed, the Examiner is invited to contact the undersigned attorney at 404.815.6147.

Respectfully submitted,

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